

**SECRETARY'S ENVIRONMENTAL ASSESSMENT REPORT
FOR A COASTAL ZONE ACT PERMIT APPLICATION**

**Re: Mountaire Farms of Delaware, Inc.
Processing Plant Expansion
CZA Permit No. 431P**

July 2017

Introduction

As required by §8.3.4 of the “Regulations Governing Delaware’s Coastal Zone” dated May 11, 1999, and amended October 1, 2001, the Secretary of the Department of Natural Resources and Environmental Control (DNREC) shall provide a written assessment of a proposed project’s likely impact on the six criteria listed in §8.1 of the regulations, as well as a preliminary determination of the sufficiency of the offset project as required in §9.0 of these same regulations. This assessment and determination is completed prior to deeming a permit application administratively complete.

The fact that DNREC considers an application to be preliminarily, administratively complete does not constitute the Department’s position as to whether the application should be approved or denied. That decision will not be made until after the public hearing. The purpose of the Secretary’s written assessment is to assist the applicant and the public to focus on issues presented in the application. It constitutes an administrative determination that the application is sufficient to proceed to a public hearing. In addition, should the Department eventually issue a Coastal Zone Act (CZA) Permit, it does not guarantee the applicant will receive other required permits.

The following is such an environmental assessment for the proposed project described in an application for a CZA permit, received from Mountaire Farms of Delaware, Inc. (“Mountaire”) on May 22, 2017.

The Proposed Project

Mountaire is seeking a permit to construct and operate a third production line in a 5,300 square foot expansion to the existing picking room at their facility located at 29005 John J. Williams Highway, Millsboro. The project will entail the installation of equipment used for killing, defeathering, eviscerating, chilling, disjointing, and cutup of poultry.

The processing plant expansion project will increase production by approximately 18%. Total air emissions will increase by 3.0 tons per year from natural gas burned in the existing boilers to provide heat for scalding. The expansion will also result in an increase in wastewater discharge flow from the processing plant from 2.3 million gallons per day (MGD) to 2.4 MGD.

Environmental Assessment

In assessing an application, §8.3.2 directs the Secretary to consider how the proposed project will affect the six criteria cited in the Coastal Zone Act, including direct and cumulative environmental impacts, economic effects, aesthetic effects, number and type of supporting facilities and their anticipated impacts, effect on neighboring land uses, and compatibility with local comprehensive plans.

Division of Energy and Climate staff reviewed the application for the above mentioned factors; the permit application was also sent to DNREC staff in the Divisions of Air Quality, Waste and Hazardous Substances, Water, Fish and Wildlife, Watershed Stewardship, as well as Coastal Programs, for review and feedback, including adequacy of the proposed offset project. No substantive comments were received from DNREC reviewers.

Assessment of each of the six criteria is below:

Direct and Cumulative Environmental Impacts

The proposed project will result in increased air emissions and increased wastewater discharge flow.

Air Emissions

New air emissions are associated with burning additional natural gas in the existing boilers to provide heat for scalding water to relax feather follicles prior to the birds being processed in the pickers to remove feathers. See Table 1 below.

Water Use and Discharge

This project will result in increased water use and wastewater discharge flow. The maximum rate of water use for boiler steam, cooling tower blow off, and cleaning water is currently 2.3 MGD and will increase to 2.4 MGD. The facility's current water allocation is sufficient for the increase in water use. Wastewater will be treated at the facility's existing wastewater treatment plant. This treatment plant consists of a dissolved air flotation unit, an aerobic lagoon, activated sludge, disinfection, and water reuse and aquifer recharge by spray irrigation.

Increased wastewater discharge will increase Total Nitrogen (TN) by 4 tons per year, Biological Oxygen Demand (BOD) by 5 tons per year, and Total Suspended Solids (TSS) by 6 tons per year. See Table 2 below.

Table 1. Change in Air Emissions Resulting from Proposed Project

Pollutant	Existing Emissions		Net Increase/Decrease		New Total Emissions		Percent Change (compare tons/year)
	<i>Lbs./day</i>	<i>Tons/year</i>	<i>Lbs./day</i>	<i>Tons/year</i>	<i>Lbs./day</i>	<i>Tons/year</i>	
SO _x	248	45.2	0.3	0.06	249	45.3	0
NO _x	113	20.7	6.6	1.2	120	21.9	6
CO	228	41.6	6.9	1.26	235	42.9	3
VOC	10	1.8	0.77	0.14	10	1.9	0
PM ₁₀	199	36.3	1.9	0.34	201	36.6	1

Table 2. Change in Wastewater Discharge Resulting from Project

Pollutant	Current Discharge Concentration (ppm)	New or Changed Discharge Concentration (ppm)	Current Discharge		Net Increase/Decrease		New Total Discharge	
			<i>Lbs./day</i>	<i>Tons/year</i>	<i>Lbs./day</i>	<i>Tons/year</i>	<i>Lbs./day</i>	<i>Tons/year</i>
TN	29.4	9.8	564	103	24	4	588	107
BOD	34.5	7.0	662	121	29	5	691	126
TSS	39.9	7.0	765	140	34	6	799	146

Stormwater

There will be no additional stormwater discharges to surface waters as a result of this project. The construction of the building will occur within an area that is already impervious surface.

Solid and Hazardous Waste

One new dumpster load per week of solid waste (aprons, shackles, knives, etc.) will be transported to the DSWA landfill in Sussex County by a licensed hauler. The DSWA landfill is outside of the Coastal Zone. There will be no hazardous waste generated by the project.

Economic Effects

The net economic impact is expected to be positive. The application states that it is anticipated that approximately 154 workers will be engaged in direct project construction activities. The weekly construction payroll is estimated to be \$90,090. An estimated \$2,800,000 of construction services and supplies is to be purchased in Delaware. One hundred seventy-seven (177) new employees are to be hired for ongoing operations as a direct result of this proposed project.

Number and Type of Supporting Facilities

There will be no new supporting facilities and services required to support the proposed project.

Aesthetic Effects

The project will occur within the footprint of the existing poultry processing plant and will be compatible in appearance to that which is already there.

Effect on Neighboring Land Uses

Effects on neighboring uses will be minimal. The nearest year-round residence is approximately 0.37 miles away.

Compatibility with County and Municipal Comprehensive Plans

The proposed facility and operation is consistent with the Sussex County Comprehensive Plan. It is zoned HI-1 (Heavy Industry) by Sussex County and is in a State Investment Area Level 4 (2015 State Strategies for Policies and Spending).

Offset Proposal

This project will increase air emissions and wastewater discharge. Adequate offsets for both have been proposed by the applicant.

Offsets for Air Emissions

Total air emissions for this project will increase by 3.0 tons per year as a result of natural gas burned in the existing boilers to provide heat for scalding. As per DNREC policy, impacts must be offset at a 1.3:1 ratio. Therefore, air emission improvements of 3.9 tons per year (TPY) are required. Mountaire intends to apply 3.9 TPY from an existing 40.6 TPY reserve, resulting in a decrease held in air emissions offset reserve to approximately 36.7 tons per year.

The 40.6 TPY reserve was created through two previous permit actions at this facility. The application for a Coastal Zone Act permit for the resource recovery plant (385P) filed by Mountaire on July 22, 2009 provided evidence of past voluntary environmental improvements and investments made prior to the time of that application, as provided for in §9.1.2 of the Regulations Governing Delaware's Coastal Zone. The environmental improvements were created by converting two (2) boilers from oil to natural gas. The resulting reduction in air emissions was 71 TPY. Mountaire requested that 13.4 tons of the annual 71 ton reduction in emissions be used as an offset for that permit (385P). DNREC agreed to allow use of the remaining emission reductions for subsequent CZA permits. The balance at that time was 57.6 TPY.

Mountaire applied for a subsequent CZA permit in 2016 for a Pellet Cooler Upgrade (423P) and applied 17 TPY of air emissions from the 57.6 TPY reserve balance to satisfy the offset requirement for the Pellet Cooler Upgrade. A balance of 40.6 TYP has been held in reserve should additional projects subject to Delaware Regulations Governing Coastal Zone be necessary.

Offsets for Wastewater Discharge

As a result of this project, discharge of wastewater will increase by 0.1 MGD. This increase will result in an increase of TN by 4.4 TPY, BOD of 5.3 TPY and TSS of 6.2 TPY. Using the 1.3:1 offset formula, the applicant must provide an offset of 5.7, 6.9 and 8.1 TPY respectively.

Mountaire will be upgrading the existing wastewater treatment plant to decrease the TN applied to cropland as a result of the expansion to below the current levels. The upgrade will be a new 150,000 gallon flow equalization basin upstream of the existing dissolved air floatation unit that treats raw wastewater produced from the processing plant facility. The improvements in effluent quality anticipated by the installation of the flow equalization basin upstream of the dissolved air floatation, at an increased discharge rate from the 2009 CZA Application of 2.2 MGD to 2.4 MGD in this 2017 application are outlined in Table 3 below.

Mountaire requests that the net improvements in TN, BOD, and TSS (30.1, 18.7, and 19.4 TPY, respectively) be held in reserve should additional projects subject to the Delaware Regulations Governing Coastal Zone requiring an offset be necessary.

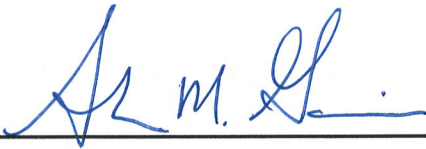
Table 3. Reduction in Wastewater Discharge as Result of Proposed Offset

Pollutant	Current Discharge Concentration (ppm)	New or Changed Discharge Concentration (ppm)	Net Increase	Required Offset	Flow Equalization Basin Offset	Offset Surplus
			<i>Tons/year</i>	<i>Tons/year</i>	<i>Tons/year</i>	<i>Tons/year</i>
TN	29.4	9.8	4.4	5.7	35.8	30.1
BOD	34.5	7.0	5.3	6.9	25.6	18.7
TSS	39.9	7.0	6.2	8.1	25.6	19.4

Sufficiency Statement and Conclusion

The Coastal Zone Act allows for, through the issuance of a new permit, expansion or extension of uses for which a CZA permit was previously issued. This application for a CZA Permit, including supplemental information, has been reviewed by the Department to determine its completeness. After a thorough review of the company's application and file, the Department considers this application to be administratively complete and sufficient for proceeding to public hearing.

Approved: _____


Shawn M. Garvin
Secretary

Date: _____

7/27/17